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FURTHER NOTES ON THE PUEBLO RUINS OF SCOTT COUNTY, *H. T. Martin.*

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FURTHER NOTES ON THE PUEBLO RUINS OF SCOTT COUNTY.

BY H. T. MARTIN.

(Contribution from the Zoölogical Laboratory, No. 188.)

Plates V to IX, and one text figure.

AT the annual meeting of the Kansas State Historical Society at Topeka in January, 1899, Dr. S. W. Williston read before that body a paper entitled "Some Pueblo Ruins in Scott County, Kansas," in which was fully set forth the results of the excavation of the ruins now known as Quartelejo, together with a list of the implements and weapons procured from the rooms which composed the old building. This paper will be found in the Kansas Historical Collections, volume 6, 1897-1900. Unfortunately it was not then possible to publish along with the paper the photographs and drawings of the ruins which were made during the excavation. In order to make the photographs and ground-plan drawing which accompany this paper as comprehensible as possible, the original description by Doctor Williston will be given almost verbatim. Since this account was based upon the field notes of the present writer, who made the excavations under the directions of Dr. Williston, its repetition here will be somewhat in the nature of a personal account.

DOCTOR WILLISTON'S ACCOUNT OF THE RUINS.

"The ruins are situated in the valley of Beaver creek (wrongly called Ladder creek on the map), in the northern part of Scott county, twelve miles due north from Scott City, and about ten miles south of the Smoky Hill river, as shown on the maps, precisely where the township line touches the

most eastern bend of the creek. At this place the valley of the creek, which here runs nearly north, is less than a mile wide, surmounted on either side by high bluffs of Tertiary material. The immediate valley is excavated in the Cretaceous chalk. The result is that here, as elsewhere in western Kansas where like geological conditions obtain, the underflow through the Tertiary sandstones, over the impervious chalk floor, comes abundantly into the valley, furnishing a considerable stream of water. Perhaps no stream in the western part of the state offers more favorable conditions for irrigation than does this in its lower part. In the dryest years there is always an abundance of water in the stream, and in the deep pools along its course there are always many fish. About a half mile above the site of the present ruins, the Tertiary underflow comes to the surface along the side of a hill in such perpetual abundance that it is utilized in the irrigation of a considerable tract of land.

"These two facts—easy facilities for unfailing and extensive irrigation, and a fish- and beaver-producing, perpetually flowing stream—are undoubtedly explanatory of the location of the ruins at this place. The ruins are situated near the middle of the valley, close to the stream, and away from any possibility of ambush by hostile savages. They occupy a small knoll of ground, and, as first seen by us, consisted of a low, rounded heap of soil and stone, perhaps 75 or 100 feet in diameter, the soil wholly overgrown by buffalo grass. The rocks are the coarse sandstone of the neighboring hills. A small excavation had been made in the middle of this mound by previous explorers, perhaps two feet in depth and of a dozen square feet in area."

In conclusion, Doctor Williston says: "One fact is established from the explorations—the ruins are of Pueblo origin. Of this there can be no question. The plan of the structure is only such as the Pueblo Indians could have devised and carried out. It is not the work of white men, either Spanish or French, though it is very probable that both the Spanish and French may have occupied this and other structures at this locality at later times, or even contemporaneously with the Pueblos. The finding of an iron ax, of rude and primitive workmanship, it is true, indicates white men's skill. It is very evident, also, that the metal instruments were used by the

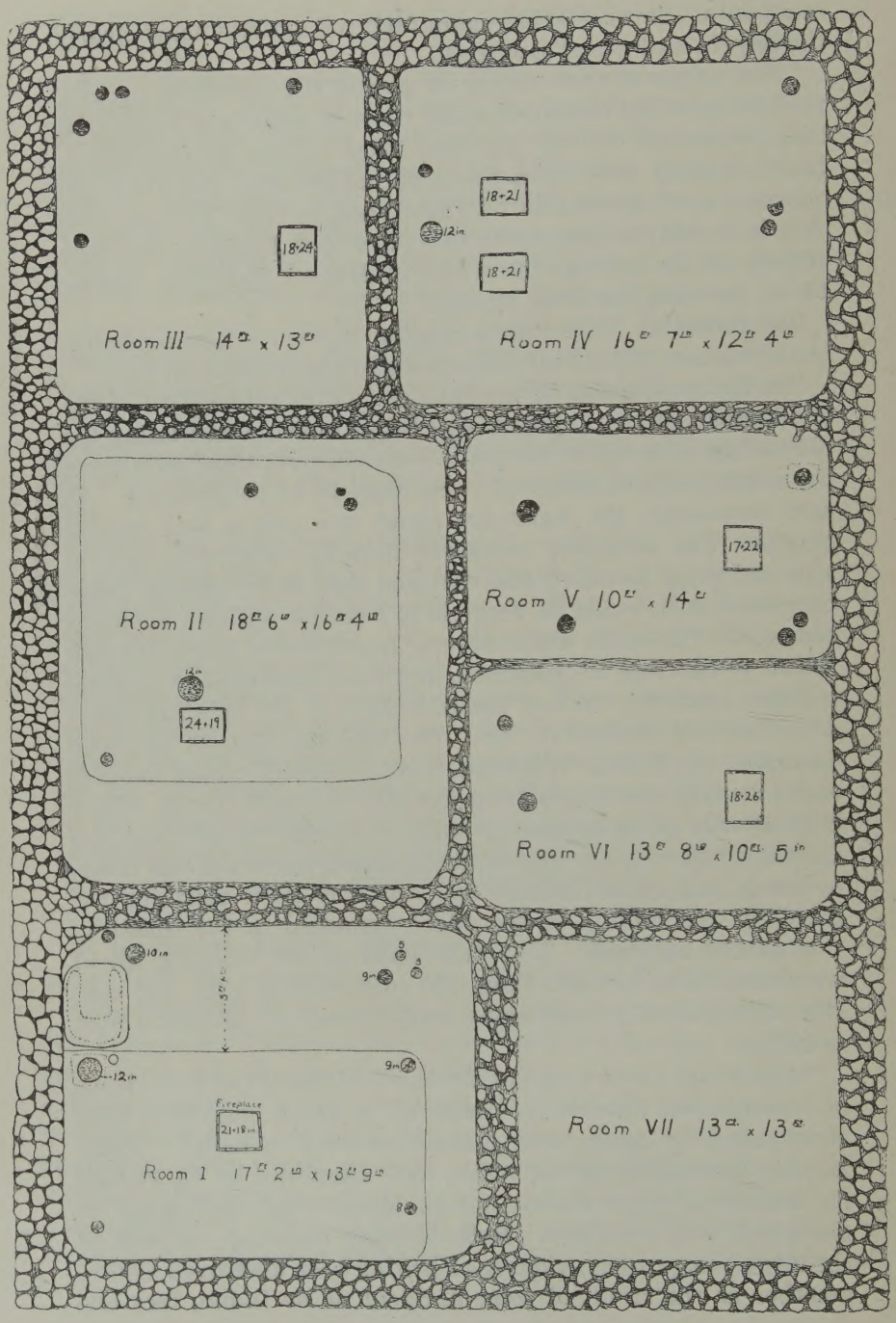
occupants. Several of the manufactured articles show clearly the imprints of metal saw teeth.

"The origin of the ruins is of course not positively proven, yet I believe that concerning this there is scarcely a doubt that they represent the old fortified place known as Quartelejo, founded about 1650 by a party of Indians who fled from the oppression of the Spaniards, from Taos, in New Mexico. The only information concerning this place that I have so far been able to obtain is from the works of Hubert Bancroft, volume 17, on Arizona and New Mexico."

The following is the full description of the ruins as published in the Kansas Historical Collections by the present writer:

"In the excavation of the chief structure referred to in the cited paper, all possible care was taken to avoid mutilating the plastering with which the walls were covered, thus permitting the exact size and shape of each room to be ascertained. As now excavated, the walls are about two and a half feet in height. The structure measures fifty by thirty-two feet in size, and stood as nearly due east and west in its greater measurements as it would be possible to locate it with an ordinary compass. The outer walls were of heavy stone, from eighteen inches to two feet in thickness, and were cemented or grouted together, making the full measurement of the building about fifty-three by thirty-five feet. The building site, as has been described by Doctor Williston, was a slightly raised mound, about seventy-five yards from the bed of Beaver creek, which here affords an abundance of water for both irrigational and domestic use. By the side of the building there are two large, hollowed out places, which had probably been used for the puddling and mixing of the adobe employed in the construction of the building. The stone used in the building, all of which had been brought from the surrounding hills, was considerable in amount, and many single pieces are all that a man can lift.

"About 100 yards south of the main edifice there is evidence of several other smaller buildings, all of which must have been constructed of adobe alone, since no rock remains. These smaller structures, two of which were examined by us, yielded no utensils or other relics; nor could their size and shape be made out with certainty. Both of these buildings, as well as the large one, present evidence of having been destroyed by fire, whether as the result of some accident or by Indian foes one


18×24
Room III 14ft x 13ft
18×21
12in
18×21
Room IV 16ft 7in x 12ft 4in
Room II 18ft 6in x 16ft 4in
12in
24×19
17×22
Room V 10ft x 14ft
18×26
Room VI 13ft 8in x 10ft 5in
10in
9in
12in
9in
Fireplace
21×18in
Room I 17ft 2in x 13ft 9in
8in
Room VII 13ft x 13ft

cannot say, of course. From the fact that no human bones were found anywhere about, the probability of design is lessened. That the larger structure had been destroyed by fire there can be no doubt, since the adobe is burnt, and charcoal is thickly scattered everywhere; the stone and bone implements also all show evidence of fire. Rooms IV and VII, as I have designated them, show only slight evidence of the fire, and it is possible that one or both of these rooms had never been covered, and hence contained but little subject to destruction by fire. Room IV had portions of the rotted posts, evidently used as a ladder, remaining.

"Charred corn was found in every room except VII, in some places four or five inches deep. In room V there had been four or five bushels of this corn in a slightly hollowed out place at one side.

"About twenty-five yards north of the main structure there appears to have been three or four small structures, each separated a small distance in an east and west line parallel with the main building. These structures were apparently circular in outline, and were perhaps teepes.

"The most interesting room in the structure is the one I will designate as room I. Its dimensions were seventeen feet by thirteen feet and nine inches. It had a raised dais or platform on two sides, about six inches high; that on the west side five feet and three inches wide; that on the north side two feet. The wider one was doubtless used for sleeping purposes, and the narrow one as a bench. Very near the center of the room there is a box-like receptacle, formed of thin stone set edgewise. Like the others described further on, the bottom of this one was about six inches below the level of the floor, and its size was eighteen by twenty-one inches. It had been plastered at the bottom, and contained, when examined, a quantity of clean wood ashes. The receptacle may have been for the grinding and mixing of corn. In the southwest corner of the room there is a peculiar structure three feet nine inches in length by two feet and one inch in width, inside measurements, built of adobe. Its walls are eighteen inches high at the west end and twelve at the east end, the slope gradual from one end to the other. The walls, five or six inches in thickness, had been nicely rounded at the top. In the middle, and joined to the west end, is a small platform, about sixteen inches in length by twelve in width, raised about six inches above the bottom

of the grooves which surround it. These grooves, shaped somewhat like a U, slope toward the closed end. This part was filled with ashes, suggesting that the use of the oven was for the baking of pottery. Near the east end was a large hole, twelve inches in diameter and eighteen inches in depth, covered with a flat rock. It contained nothing save fine dust.

"The walls and floors were nicely plastered. The plastering gave no indications of finger marks, but seemed to have been smoothed off with some instrument. Stones that might have answered such uses were found in the rooms. In this room was found a small pipe, decorated with horizontal markings. Here also were found a needle or awl for the sewing of hides, several arrow-heads, fragments of pottery, and bone needles. The remains of two posts, about eighteen inches apart, were found in the northeast corner, evidently for the uprights of a ladder for ingress and egress. Similar holes in like positions were found in the other rooms. There were no indications of doors or other openings in any of the rooms. The roof was evidently made of willow poles or brush covered with adobe, as large quantities of the latter show impressions of twigs.

"Room II was sixteen feet and four inches in width by eighteen feet six inches in length, and had both wall and floor plastered. The fireplace was two feet by one foot seven inches in size, and close by it was a hole twelve inches in diameter. On the east end there was a bench, as in room I, four feet two inches in width, and on the north side one two feet in width, while on the other two sides the width was but twelve inches, but raised to about ten inches in height. Close to the fireplace was found a grooved stone maul, ribs with marks of a saw upon them, arrow points, pottery, bone and stone scrapers, and a small pipe. On the ledge at the east end was found the half of an iron ax or wedge. The iron of course is much rusted, and the tool appears to have been split longitudinally and transversely by some mishap. It had a groove near the head, instead of an eye, for the attachment of the handle, after the manner of the stone axes of the aborigines. This room contained more charred corn than did any of the others.

"Room III was fourteen by thirteen feet in size, with plastered walls and floor, the corners rounded at the east end and square at the west. It had a fireplace eighteen inches by twenty-four, and a raised dais four feet wide at the west end. The holes for the posts supporting the roof and for the ladder

were as in the other rooms. The plastering turned up about the posts showed that this work had been done after the roof had been placed over the structure. This room furnished grinders and several bone implements—scrapers and fleshers—made from the shoulder-blade of the buffalo and deer and antelope. The wall posts were rotted in the ground, and not burnt as in the other rooms, nor were the bone implements partly burned, as was the case with those in the other rooms. In this room, also, was found part of a musical instrument, a flute or flageolet, made from the wing bone of a large bird; also a bone implement with a serrated edge.

"In room IV fewer implements were found than was to be expected, for few marks of fire were visible. Owing to this, the room was in better condition for articles to have been preserved. It is just possible that the fire started on the south side, giving the occupants a chance to save most of their belongings from this room. Several scrapers, knives, also the small arrow points on plate I, Nos. 1, 2, 4, 5 and 12, 16, 17, 18, 19, 20, all of which are fine examples of workmanship, were found.

"Room V was the smallest in the building, being only ten by fourteen feet in size. It had well-plastered walls and floor, a fireplace seventeen by twenty-two inches in size, a large quantity of corn, arrow-heads, grinders, scrapers, pottery, etc. Close by the fireplace there was a hole in the floor covered by a flat stone that had been undisturbed. At its bottom was found half of a clam shell, which had been sawed lengthwise with a toothed saw, the tooth marks being very plainly apparent. In the northwest corner was a small oven, nine inches in width and sixteen in depth, excavated from the wall of the room and plastered throughout. It contained three or four inches of wood ashes in the bottom. In this were also found three oval and one square adobe bricks, about ten by fourteen inches in size, flattened above and rounded below. They may have been used in the baking of tortillas.

"Room VI was ten feet five inches in width by thirteen feet and eight inches in length. The level floor had been plastered, as also the fireplace, which was eighteen by twenty-six inches in size. There was a narrow partition between this room and room V, and since no indications of a ladder were found here it is possible that the two rooms had been connected. Several

scrapers, of bone and flint, together with grinders, etc., were found here.

"Room VII, thirteen feet square, differed from all others in having no fireplace or plastered walls. Numerous bones of bison, deer, antelope, coyote, badger, etc., were discovered in this room. The only relics were bone and flint scrapers. Probably the room had been used as a sort of storehouse, and not for human dwelling.

"The pottery found was in part composed of plaster of Paris, possibly obtained from the crystals of selenite scattered over the chalk exposures in the vicinity. A number of ribs were found which had been smoothed at one end into a sort of spatula, and had probably been used in the making of pottery or in the plastering of the building. Coiled as well as smooth pottery was found, but only a single piece that showed evidence of decoration. Some of this pottery has been submitted to Professor Hewitt, of Las Vegas, N. M., who has given much attention to the work of the Pueblo Indians. He was of the opinion that all this pottery had been introduced from New Mexico, and had not been made in the vicinity of the building or village. Probably this is the furthest east that such pottery has yet been found. In one of the rooms were found several squash seeds; some between two pieces of pottery, in good condition, others much decayed."

In the above account by Doctor Williston, he very graphically described the locality, surroundings and natural resources in the immediate vicinity of the ruins, which he had visited in 1896, but unfortunately was unable then thoroughly to investigate. He also gave a number of important quotations from the works of Hubert Bancroft, an eminent writer on Arizona and New Mexico. These works treat largely of the early history of the Spanish in America, and contain important data relative to the position of the pueblo known as Quartelejo, and the condition under which this isolated post was first built and peopled. From the above-named works it appears that about 1650 a band of Taos Indians fled to the plains and fortified a place called Quartelejo. In the papers of the Archæological Institute of America, American series V, Hemenway Archæological Expedition, A. F. Bandelier, page 181, says: "In 1704 the Indians of the pueblo of the Picuries abandoned their village in northern New Mexico and fled to the plains, where they established themselves at a place called El Quar-

telejo. Superstition was, from all indications, the cause of this hasty movement." In a foot note he adds: "This flight of the Indians of the Picuries to the Quartelejo is mentioned in several documents. I quote here only the witchcraft trial, entitled '*Causa Criminal contra Geronimo Dirucaca, Indio del Pueblo de Picuris,*' 1713, MS., fol. 16, 17. The same document also fixes the date. In regard to the return from Quartelejo, it was effected in 1706 by Sargente Mayor Juan de Uribarri."

For some reason or other there appears to be a conflict as to the exact date of the settlement of the Indians at Quartelejo, yet both the above writers agree that the return to Mexico was effected in 1706. This would indicate clearly that both Bancroft and Bandelier were writing about the movements of one and the same band of Indians. Furthermore, it does not appear credible that the governor of New Spain would have allowed these discontented Indians to have stayed at Quartelejo from 1650 until 1704, a period extending over fifty years, without an effort being made to effect their return, and in all probability Bandelier's date of the founding of this isolated pueblo in 1704 is the more correct.

He further states that "in all probabilities the place got its name from the fact that these Picuries Indians made a temporary stay there." This is also intimated by Fray Silvestre Valez de Escalante in his letter to Father Agustin Morfi, April 2, 1778. After the evacuation of the pueblo in 1706 at the instance of Uribarri, another band of friendly Indians must have taken possession of and occupied the place for a number of years, for from Bandelier we learn that in 1719 Governor Don Antoni Valverde Cossio, having determined upon a campaign into the north and northeastern plains (a movement made chiefly against the Yutes and such of the Comanches as had joined them), penetrated as far as the Quartelejo, and even beyond. A part of Valverde's object was to secure the rancherias of the Jacarrilas against their foes. Part of these friendly Apaches lived at Jacarrila, forty leagues north of Santa Fe, and another band lived at Quartelejo. Again, we find that in the following year, 1720, Don Pedro de Villazur called at this pueblo on his ill-fated trip to the Pawnee village which is supposed to have been located on the Platte river, when all perished at the hands of the treacherous Indians. After this I have been unable to find the place mentioned by any other writers of early southwestern history. And it is

more than probable that after the Pawnees had annihilated Villazur and his soldiers they also, to check the inroads and settlement of the Spanish and their allies, destroyed the Quartelejo, thus effectually clearing the whole country north of the Arkansas river. This would admirably account for the entire pueblo and settlement being destroyed by fire, as it undoubtedly was. From the position of the utensils and implements found, a very hurried departure must have been made from the main structure. Most of the meal-grinding apparatus found in each room appeared to be left in a group, as though just laid aside after use. This, and the finding of so much charred corn in most of the rooms, would surely indicate that no prearranged plan of evacuation had been decided upon. That the ruins are those of the Quartelejo mentioned by the old Spanish writers, to which conclusion Doctor Williston came after seeing the group of relics obtained, there can be no doubt.

Dr. F. W. Hodge, of the Bureau of Ethnology, says, in the American Anthropologist, volume 2, October and December, 1900, that he regards the discovery of the ruins as of great interest, that they are of typical pueblo fashion, and, in conclusion, says: "The former existence of this pueblo has been known to students of southwestern history and ethnology for a number of years, but not until the publication of the results of the investigation had its situation been known, and there is no reasonable doubt that the identification is correct, for pueblo architecture is intrusive in Kansas."

If the identification by Doctor Williston as Quartelejo is correct, then the exact locality of this pueblo, so often referred to by the old Spanish writers, and to which Don Juan de Archuleta journeyed, is assured, and as such should be of great value in assisting to prove more definitely that the localities designated by Brower and Hodge as the site of Quivera and Harahey are correct, and thus have some bearing as to the probable line of march of Coronado, and help to prove that he did cross the Arkansas river.

Brower says, in his "Harahey," page 27, volume 2: "When the final acceptance shall have been established that Coronado reached and crossed the Arkansas river and followed its course to the great bend, then the true site of Quivira and Harahey will have been finally reached and comprehensively understood."

By referring to a quotation given by Doctor Williston in his

paper taken from the narrative of Fray Silvestie Velez de Escalante, April 2, 1778, translated "In the Land of Sunshine," we find that Don Archuleta found in the possession of the Indians of Quartelejo pieces of copper and tin, and that they said they had procured them from the Quivera pueblos, to which they had journeyed from Quartelejo.

If these Indians had visited Quivira as they claimed, and Quivira and Harahey was where Brower and Hodge have located it, northeast of Quartelejo, then the presence in the ruins of the sandstone arrow straighteners can be satisfactorily explained, and the possession of knives and arrow heads of the Harahey type and material does tend to prove they had communicated in some way with the Quivira settlement. The arrow straighteners referred to, and which were found in the ruins, are made of the Dakota Cretaceous sandstone.

The writer has found many arrow straighteners on the western Kansas prairie made by the plains Indians, within a few miles of the ruins, but these were all of a different and harder material. Dakota sandstone in any shape is intrusive in the neighborhood of the ruins, but a journey to Quivira by the Indians of the Quartelejo would take them directly through the outcroppings of Dakota sandstone which occur in Ellsworth, Barton and Rice counties, and enable them to procure and carry back with them this valuable acquisition.

In a previous paper the writer made mention of a peculiar U-shaped structure that looked like it might have been used for the baking of pottery, on the raised platform-like center piece, a photograph of which is shown on plate VI, fig. 3. This, Dr. F. W. Hodge, in the American Anthropologist of October and December, 1900, says is a typical pueblo grinding trough, and on the raised platform in the center was undoubtedly fixed the grinding stone.

The small fireplace and chimney built into the wall of room V is due to the influence of Spanish associations, for at this early date chimneys were unknown to the Pueblo Indians of New Mexico. The chimney leading to the roof was carried up the center of the wall between rooms V and VI, and was plastered inside, provision being made to allow for room for this by a thickening of the wall at this point. It is of course not known of what material the inner walls were composed, but from the amount of rock that had been removed from the ruins for building purposes by settlers the past twenty years,

and the amount remaining at the time of the excavations, I think it is safe to presume that the whole structure, with one exception, was composed of rock. The wall separating rooms V and VI was entirely too thin to allow of being built of stone, and was in all probability made of willows woven together and plastered over. The division wall extended clear across the room to a height of eighteen inches, and although no opening for communication showed at this height, it is more than possible that these two rooms were connected by some opening in the division wall higher up, considering the fact that in room VI no post holes remained showing any indications of their having had a ladder for communication with the roof.

It is much to be regretted that out of the vast amount of material that has been collected in and around the 100 or more village sites enumerated in Brower's Harahey, not more than a dozen specimens have been secured for the University collection of archæological material. Yet Brower states that more than 10,000 archæological specimens have been gathered, and are deposited in the museum of the State Historical Society of Minnesota.

As a means of advancing the study of the earliest history of the state, and as an inducement to students interested in archæology and ethnology, scarcely could there be anything more valuable and important than a well labeled, systematically arranged series of archæological specimens collected from these historical old village sites of Quivira and Harahey, visited so long ago by Coronado and his followers.

I here wish to convey my thanks to Dr. C. E. McClung for his assistance in the preparation of this paper, and for his kindly advice and corrections.

In the near future a model of these interesting ruins, the first ever inhabited by white man in the state of Kansas, will be constructed and placed in the University museum.

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